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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/800,456	03/15/2004	Christopher Madigan	71,024-004	1220

27305 7590 07/12/2005

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EXAMINER

PATEL, VISHAL A

ART UNIT PAPER NUMBER

3679

DATE MAILED: 07/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/800,456

Applicant(s)

MADIGAN, CHRISTOPHER

Examiner

Vishal Patel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 21 is/are allowed.
- 6) ☒ Claim(s) 1-13 and 15-18 is/are rejected.
- 7) ☒ Claim(s) 14 and 20 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/15/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 10 recites the limitation "said laydown seal" in line 2. There is insufficient antecedent basis for this limitation in the claim.
3. Claim 11 recites the limitation "said lip member" in line 2. There is insufficient antecedent basis for this limitation in the claim.
4. Claim 12 recites the limitation "said lip member" in line 2. There is insufficient antecedent basis for this limitation in the claim.
5. Claim 13 recites the limitation "said lip member" in line 3. There is insufficient antecedent basis for this limitation in the claim.
6. Claim 15 recites the limitation "said laydown seal" in line 3. There is insufficient antecedent basis for this limitation in the claim.
7. Claim 16 recites the limitations "said lip element" in line 2. There is insufficient antecedent basis for this limitation in the claim.
8. Claim 18 recites the limitations "said lip member" in line 3. There is insufficient antecedent basis for this limitation in the claim.
9. Claim 19 recites the limitation "said laydown seal" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 1, 3-6 and 8-13 rejected under 35 U.S.C. 102(b) as being anticipated by Karcher (US. 4,696,479).

Karcher discloses a shaft seal assembly comprising an annular carrier, a radially acting shaft seal element mounted on the carrier for encircling a rotating shaft to be sealed and an annular felt washer fixed to the carrier, such that the carrier, the shaft seal element and the felt washer are unitized (seal 38, felt washer 70 and carrier formed by 20 and 54 are unitized). The shaft seal element includes a laydown seal member.

The shaft seal assembly having an annular retainer (retainer 74) *for retaining the shaft seal element in engagement with the shaft (intended use)*. The retainer is integral with the carrier (the retainer is integral with the carrier). The washer is fixed (the washer is fixed) *by adhesion to the carrier (method limitation is given no patentable weight in an apparatus claim)*. The shaft seal element includes a laydown seal member (38) and a radial lip member (92 or protrusion between recesses 102) fabricated of rubber and extending in axially and radially spaced relation to the laydown seal member *to engage the shaft (intended use)*. The carrier includes an inner case (54) and an outer case (20) extending in axially and radially spaced relation to one another to define a recess (recess between 54 and 20 that has the retainer 74) therebetween *for receiving the retainer to maintain the shaft seal element in engagement with the shaft (intended use)*. The

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retainer has a retaining portion extending from the retainer into the recess (the entire retainer is retained in the recess) *for retaining the retainer in engagement with a bore through which the shaft extends (intended use)*. The retaining portion engages the laydown seal member (80 contacts the laydown seal). The retaining portion engages the laydown seal member and a lip member (the retainer portion contacts the laydown seal, which contacts the carrier and the carrier contacts the lip member). The retaining portion is wedged between the laydown seal and the lip member (the retaining portion is wedged between the laydown seal and the lip seal).

The retainer includes an inner edge (edge of 74) and the retaining portion includes a cylindrical wall (cylindrical wall that extends and contacts the laydown seal) extending perpendicularly from the inner edge toward the lip member to an interior edge (the cylindrical wall extends perpendicularly from the inner edge toward the lip member to an interior edge of 80).

12. Claims 1, 3 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Stearns (US. 2,466,335).

Stearns discloses a shaft seal assembly having an annular carrier (carrier formed by 18 and an outer casing from 18), a radially acting shaft seal element (66) mounted on the carrier *for encircling the shaft to be sealed (intended use)*, an annular felt washer (14) fixed to the carrier, such that the carrier, the shaft seal element and the felt washer are unitized (the members of the shaft seal assembly are unitized), an annular retainer (20) *for retaining the shaft seal element in engagement with the shaft (intended use)*, the washer includes an annular flange (flange laying under 20) axially underlying the retainer, the washer includes the annular flange extending

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axially under the retaining portion to the lip member (seal 66 having an edge at an end that is considered to be a lip), the flange engages the retaining portion to wedge the retaining portion

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 2 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Karcher in view of Toth et al (US. 6,257,587).

Karcher discloses the claimed invention and further discloses that the laydown seal (38) is formed of elastomeric material but fails to disclose that the laydown seal is formed of PTFE. Toth discloses a lip seal 44 that is formed of elastomer or PTFE. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the laydown seal of Karcher to be formed of PTFE as taught by Toth, since having a seal med of elastomer or PTFE is considered to be art equivalent.

Allowable Subject Matter

15. Claims 14 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

16. Claims 15-16 and 18-19 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

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17. Claim 21 is allowed.

Conclusion


18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hatch et al, Ratti, Nagasawa, Ikeda et al, Ohma, Abraham et al, Belsanti, Winckler and McCarthy.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vishal Patel whose telephone number is 571-272-7060. The examiner can normally be reached on 6:30am to 8:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on 571-272-7087. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

VP
7/5/05


Patent Examiner
Vishal Patel